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Notice of Allowability

Application No.

10/529,104

Examiner

Lam P. Pham

Applicant(s)

KONNO, TAKESHI

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/19/07.
2. ☒ The allowed claim(s) is/are 1,2 and 7-10.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Joseph Carrier on April 25, 2007.

The application has been amended as follows:

Paragraph on page 4, lines 8-19 has been replaced by the following:

"An electronic key system of the present invention has a transmission antenna, a controller connected to the transmission antenna and a portable transceiver for transmitting ID data based on a request signal transmitted from the controller through the transmission antenna, wherein the controller receives the ID data through a receiving antenna, the electronic key system for a vehicle further comprising first means which outputs a first request signal to the portable transceiver based on activation of the controller, second means which outputs a second request signal to the portable transceiver following the first request signal, and in response to an ON operation of a start switch for the vehicle, third means for detecting the ID data from the portable transceiver based on the request signal, and fourth means for warning an operator when the ID data is not received from the portable transceiver even though the first request signal has been outputted from the first means and warning the operator when the ID data is not received from the portable transceiver, even though the second

request signal has been outputted from the second means, wherein when the ID data is detected in response to the first request signal, the controller allows power to be supplied to electrical component drive circuits, and wherein when the ID data is detected in response to the second request signal, the controller allows power to be supplied to the vehicle such that vehicle travel is possible.”

Paragraph on page 6, line 20 – page 7, line 9 has been replaced by following:

“Another aspect of the electronic key system for a vehicle of the present invention is that it has a controller mounted on the vehicle and a portable transceiver for transmitting an acknowledgement signal based on receipt of a request signal from the controller, the controller comprising first means for outputting a first request signal to the portable transceiver based on an ON operation of a start switch for the vehicle, second means for detecting an acknowledgement signal from the portable transceiver based on the first request signal or a second request signal, third means for outputting a warning when the acknowledgement signal is not detected in the second means in response to said first request signal, regardless of output of the second request signal from a fourth means, the fourth means for outputting the second request signal to the portable transceiver every fixed period of time during travel of the vehicle, and fifth means for outputting a warning when the acknowledgement signal is not detected in the second means in response to said second request signal from the fourth means.”

In claim 1, line 16: insert “first” between “the” and “request signal”, then delete [or] after “the first means” and insert “and warning the operator when the ID data is not

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received from the portable transceiver, even though the second request signal has been outputted from”.

Bl. ~~Claims 3-6 (canceled).~~

In claim 7, delete from lines 4-13 and insert the following:

“first means for outputting a first request signal to the portable transceiver based on an ON operation of a start switch for the vehicle;

second means for detecting an acknowledgement signal from the portable transceiver based on the first request signal or a second request signal;

third means for outputting a warning when the acknowledgement signal is not detected in the second means in response to said first request signal, regardless of output of the second request signal from a fourth means;

the fourth means for outputting the second request signal to the portable transceiver every fixed period of time during travel of the vehicle; and

fifth means for outputting a warning when the acknowledgement signal is not detected in the second means in response to said second request signal from the fourth means.”

In claim 8, line 2: insert “first” between “the” and “request signal”.

In claim 9, line 2: delete [third] and insert “fifth” before “means”.

Allowable Subject Matter

2. Claims 1-2 and 7-10 are allowed; renumbered as 1-6.
3. The following is an examiner's statement of reasons for allowance:

There is a reference that teach a smart card system for vehicle that generates a warning to an operator of the vehicle when a request for stopping the ignition is initiated and a valid card/key is missing from the vehicle to prevent a walk-home situation or when the operator leaving the vehicle without the valid card to prevent a lockout situation as found in Proefke et al. (US 6386447). There is another reference that teach an electronic key system that requires the presence of a valid entry card for unlocking the vehicle doors as well as starting the vehicle as found in Kurozu et al. (US 5157389). However, there are no references in prior art fairly teach or suggest:

An electronic key system (claim 1) for a vehicle, including a transmission antenna, a controller connected to the transmission antenna and a portable transceiver for transmitting ID data based on a request signal transmitted from the controller through the transmission antenna, wherein the controller receives the ID data through a receiving antenna,

the electronic key system for a vehicle further comprising:

first means which outputs a first request signal to the portable transceiver based on activation of the controller;

second means which outputs a second request signal to the portable transceiver following the first request signal, and in response to an ON operation of a start switch for the vehicle;

third means for detecting the ID data from the portable transceiver based on the request signal; and

fourth means for warning an operator when the ID data is not received from the portable transceiver even though the first request signal has been outputted from the first means and warning an operator when the ID data is not received from the portable transceiver even though the second request signal has been outputted from the second means the second means, which was not taught by prior art.

An electronic key system (claim 7) for a vehicle, including a controller mounted on the vehicle and a portable transceiver for transmitting an acknowledgement signal based on receipt of a request signal from the controller, the controller comprising:

first means for outputting a first request signal to the portable transceiver based on an ON operation of a start switch for the vehicle;

second means for detecting an acknowledgement signal from the portable transceiver based on the first request signal or a second request signal;

third means for outputting a warning when the acknowledgement signal is not detected in the second means in response to said first request signal, regardless of output of the second request signal from a fourth means;

the fourth means for outputting the second request signal to the portable transceiver every fixed period of time during travel of the vehicle; and

fifth means for outputting a warning when the acknowledgement signal is not detected in the second means in response to said second request signal from the fourth means.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tsuria et al. (US 5939975) disclose a theft prevention system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lam P. Pham whose telephone number is 571-272-2977. The examiner can normally be reached on 10AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lam P Pham
Examiner
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April 27, 2007.


BENJAMIN C. LEE
PRIMARY EXAMINER